



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0530; Directorate Identifier 2011-SW-075-AD;**

**Amendment 39-17247; AD 2012-22-11]**

**RIN 2120-AA64**

**Airworthiness Directives; Bell Helicopter Textron Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Bell Helicopter Textron (BHT) Model 412, 412EP, and 412CF helicopters. This AD requires a repetitive inspection of the collective lever for a crack, and if there is a crack, before further flight, replacing the collective lever with an airworthy collective lever. This AD was prompted by a reported failure of a collective lever. The actions are intended to detect a crack in the collective lever, which could lead to failure of the collective lever and subsequent loss of control of the helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Bell Helicopter

Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101; telephone (817) 280-3391; fax (817) 280-6466; or at <http://www.bellcustomer.com/files/>. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**EXAMINING THE AD DOCKET:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Martin Crane, Aerospace Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5170; email [martin.r.crane@faa.gov](mailto:martin.r.crane@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Discussion**

On May 22, 2012, at 77 FR 30232, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to certain serial-numbered BHT Model 412, 412EP, and 412CF helicopters with a collective lever, part number (P/N) 412-010-408-101. That NPRM proposed to require within 25 hours time-in-service (TIS) or 30 days, whichever occurs first, and thereafter at intervals not to exceed 100 hours TIS, cleaning the collective lever

and inspecting it for cracks with a 10X or higher power magnifying glass. If there is a crack in the collective lever paint finish, the NPRM proposed to require removing the collective lever from the swashplate and performing a fluorescent penetrant inspection, and if there is a crack in the collective lever, before further flight, replacing the collective lever with an airworthy collective lever. The proposed requirements were intended to detect a crack in the collective lever, which could lead to failure of the collective lever and subsequent loss of control of the helicopter.

### **Comments**

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (77 FR 30232, May 22, 2012).

### **FAA's Determination**

We have reviewed the relevant information and determined that an unsafe condition exists and is likely to exist or develop on other products of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

### **Related Service Information**

We reviewed Bell Helicopter Alert Service Bulletin (ASB) No. 412-11-148 and ASB No. 412CF-11-47, both Revision A, and both dated December 12, 2011, which describe procedures for repetitively inspecting the collective lever with a magnifying glass and a strong light source and, if necessary, a fluorescent penetrant inspection. If there is a crack, the ASBs require replacing the collective lever.

### **Differences Between this AD and the Service Information**

The BHT ASBs require compliance within 100 hours of flight time for the initial inspection; this AD requires compliance within 25 hours TIS or 30 days, whichever occurs first. If there is a crack, the BHT ASBs require reporting the defect to Bell Product Support Engineering; this AD does not. The BHT ASBs allow a portion of the collective lever to be inspected by a mirror and light only without a magnifying glass; this AD requires using a 10X or higher power magnifying glass for the entire inspection.

### **Costs of Compliance**

We estimate that this AD will affect 83 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Inspecting the collective lever requires one work-hour at an average labor rate of \$85 per work-hour, for a cost per helicopter of \$85 and a total cost to the U.S. operator fleet of \$7,055 per inspection cycle. Replacing a cracked collective lever requires 10 work-hours at an average labor rate of \$85 per work-hour and required parts will cost \$12,883, for a total cost of \$13,733 per helicopter.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-22-11 **BELL HELICOPTER TEXTRON:** Amendment 39-17247;

Docket No. FAA-2012-0530; Directorate Identifier 2011-SW-075-AD.

#### **(a) Applicability.**

This AD applies to Model 412 and 412EP helicopters, serial numbers (S/N) 33001 through 33213, 34001 through 34036, and 36001 and higher; and Model 412CF helicopters, S/N 46400 and higher; with a collective lever part number (P/N) 412-010-408-101 installed, certificated in any category.

#### **(b) Unsafe Condition.**

This AD defines the unsafe condition as a cracked collective lever, which could result in failure of the collective lever and subsequent loss of control of the helicopter.

#### **(c) Effective Date.**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance.**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions.**

Within 25 hours time-in-service (TIS) or 30 days, whichever occurs first, and thereafter at intervals not to exceed 100 hours TIS:

(1) Using cleaning compound (C-318) or equivalent, thoroughly clean the collective lever.

(2) Using a 10X or higher power magnifying glass, inspect the collective lever in the areas shown in Figure 1 of Bell Helicopter Textron Alert Service Bulletin (ASB) 412-11-148, Revision A, dated December 12, 2011 or Bell Helicopter Textron ASB 412CF-11-47, Revision A, dated December 12, 2011, as appropriate for your model helicopter.

(3) If there is a crack in the paint, remove the collective lever from the swashplate assembly.

(i) Remove paint and primer from the area around the crack.

(ii) Fluorescent penetrant inspect the area of the crack.

(4) If there is a crack in the collective lever, before further flight, replace the collective lever with an airworthy collective lever.

**(f) Alternative Methods of Compliance (AMOCs).**

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Martin Crane, Aerospace Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth,

Texas 76137, telephone (817) 222-5170, email [martin.r.crane@faa.gov](mailto:martin.r.crane@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Subject.**

Joint Aircraft Service Component (JASC) Code: 6230, Main Rotor.

**(h) Material Incorporated by Reference.**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Bell Helicopter Textron Alert Service Bulletin No. 412-11-148, Revision A, dated December 12, 2011.

(ii) Bell Helicopter Textron Alert Service Bulletin No. 412CF-11-47, Revision A, dated December 12, 2011.

(3) For Bell Helicopter service information identified in this AD, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101, telephone (817) 280-3391, fax (817) 280-6466, or at <http://www.bellcustomer.com/files/>.



(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on October 26, 2012.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-27059 Filed 11/14/2012 at 8:45 am; Publication Date: 11/15/2012]